

3-1979

## ACUTA eNews March 1979, Vol. 8, No. 3

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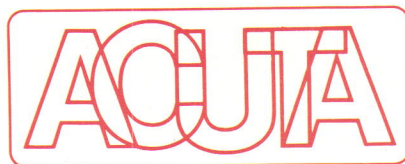


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# NEWS

**Association of College & University Telecommunication Administrators**

**THE VOICE OF TELECOMMUNICATIONS IN HIGHER EDUCATION**

VOLUME 8, NUMBER 3

MARCH, 1979

RUTH A. MICHALECKI, EDITOR

## PRESIDENT'S MESSAGE

Those of you who were fortunate enough to attend the Regions I and II Winter Workshop at the University of Maryland's Centre of Adult Education, College Park campus January 23rd - 26th will join me I'm sure in congratulating our host Peter Wrike and Region I Director Mort Berlan for putting together an interesting and enjoyable learning experience. Both the facilities and the presentation were absolutely first-class.

On Wednesday 24th we were officially welcomed by Charle R. Janthro, Director of Physical Plant, University of Maryland, and heard Least Cost Routing equipment experiences from local members Homer Lange (George Washington University) and Peirre Malochee (Catholic University). In the afternoon Dr. Charles Jackson, a member of the House of Representatives Sub-Committee on the Communications Act Re-Write brought us up to date on this important issue and afforded us some knowledgeable comment on historical influences. To round off an excellent presentation Dr. Jackson gave us his predictions for the future of the Communications Industry. The final session of the day had William Von Alven of the FCC (ably assisted by our old friend Frank Laden) telling us all about the FCC Interconnect Registration program and giving us an insight into the types of equipment presently under review.

On Thursday 25th we had sessions on Interconnect at the Massachusetts Institute of Technology (Mort Berlan, M.I.T.); Information Distribution via Digital Modulation, in which William Von Meiser covered the field; Microwave Communication Services - an overview of MCI's Execunet and Telephone Management Services to 40 metropolitan United States cities, by Jeff Oslander and Carl Vorder Bruegge, and the day was concluded with a presentation on Educational Delivery Systems (Teleconferencing and the Gemini 100 Electronic Blackboard) by Donna Martin and Gordon Pollock of C & P Telephone and Bill Lochten of Western Electric.

On Friday 26th Peter Wrike described for us University of Maryland's experiences with Interconnect and then an impromptu "inquest" on the Workshop brought the proceedings to an end. Some of the comments and suggestions received from the 35 or so in attendance would indicate that we should attempt to encourage more

interaction and sharing of experiences, airing of problems etc. during the sessions themselves rather than in a social setting and one of the suggestions was that certain meals be arranged in such a way as to encourage discussion on certain topics - a card on each table would announce each lunchtime (or breakfast) topic for that particular table. This suggestion was passed along to our 1979 Conference Host, Connie Gentry and she agreed to give it a try in Atlanta this coming August.

At the Board of Director's Meeting which followed the Workshop, Connie gave the Board a breakdown of the Program and social events which she has planned and every item was received enthusiastically. This will definitely be an imaginative and exciting Conference and one which you really can't afford to miss.

Other items of interest discussed at the Meeting included Annual Dues - we will decide shortly on whether or not these should be increased for the coming year. Most of our Officers' respective institutions are still absorbing a major part of ACUTA's operating expenses and this situation cannot be allowed to continue forever. Self-sufficiency must be one of our ultimate objectives. There are other factors which we will have to take into consideration before making a decision in this regard; for example how many members pay annual dues out of their own pockets? Whatever the outcome, please be assured that any decision to increase annual dues will only be made if it is consistent with a planned development program for the Association. It will not be sufficient argument that we have the lowest dues structure of any comparable association or that inflation is eating away at our operational dollar, although both of these are obviously true.

The question of Industry Memberships arose once again on the Agenda and I reported that the majority of correspondence received in response to my earlier request in ACUTA News favoured retention in the same form as they exist as present. Since the response has been extremely poor to date, however, I would ask you all to let me have your comments on this important issue at the very earliest opportunity.



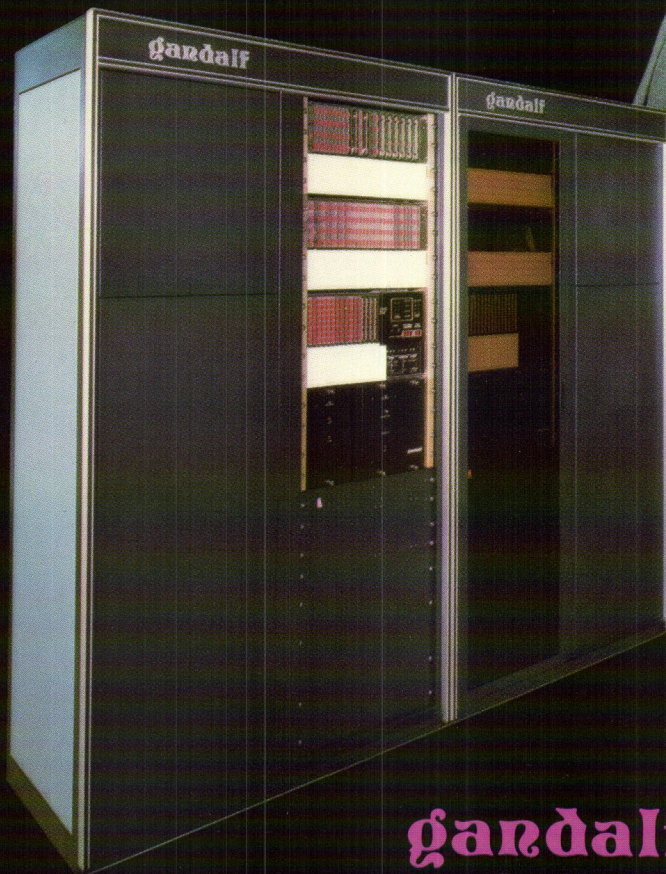
# the user's choice

## several hundred in operation

PACX (Private Automatic Computer eXchange) is a sophisticated high speed data switching and port contention system designed to optimise the allocation and use of your resources.

PACX continuously scans all terminal channels. When a service request is received, the user is connected to an appropriate port in less than one second.

Plug-in port and terminal modules (some with integral short haul data sets) offer system expansion or reconfiguration without high cost or delay. As many as 510 terminals can contend for service from up to 254 ports.



Regardless of system loading, all channels remain completely transparent to speed, code and data format up to 9600 bps asynchronous or 19.2 Kbps synchronous. Ports on both local and remotely located computers can be assigned up to 64 different class designations, accessible on request from the terminal keyboard. Reallocation of resources, at any time, is achieved by reassigning port classes via the control panel. Complete system status is seen at a glance. Data suitable for statistical analysis is continuously generated. PACX puts control over data communications back where it belongs.

Shown here is Dual-PACX (up to 510 terminals and 254 ports). Standard PACX (up to 254 terminals and 126 ports). Mini-PACX (up to 48 terminals and 32 ports). Complete data is available upon request.

## gandalf

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Canada: Gandalf Data Communications Ltd., Gandalf Plaza, 9 Slack Road, Ottawa  
Ontario, Canada K2G 0B7 (613) 225-0565

U.K.: Gandalf Digital Communications Ltd., 4 Cranford Court, Hardwick Grange,  
Cheshire, England



## President's Message continued:

The Industry Member Chairman for this year will be J.R. Werner of C & P Tel of Virginia. Dick has some constructive ideas on the question of Industry Memberships and I am extremely pleased that he has consented to come aboard to replace our old friend Don Walsh of GTE who, having moved to California is no longer able to take such an active part in ACUTA. Good luck, Don. We will miss you.

Talking about California, one of the offers we have received for a future Conference site is San Francisco, where Virginia Penekis of Berkeley would be the host. Another offer is Banff, Alberta (Gord Morrison, University of Calgary) and we are still working on an east coast location. The site for the 1981 (and maybe '82) will be decided at the annual conference in Atlanta. Maybe we will receive some more offers between now and August!!

With regard to future Seminar sites, I would be pleased to hear from any member who would be prepared to host a Seminar/Workshop in the Fall of 1979 or the Spring/Fall of 1980. Don't be shy. You wouldn't be expected to do it all alone, and if you talk to anyone who has hosted such an event in the past you will find that they found it to be an extremely rewarding and fulfilling experience.

Before closing I would like to re-iterate my appeal for ACUTA members to write articles for publication in the trade journals. There is so much mileage to be gained from such articles that it is really worth the effort. The response that I personally and new member Kim Sprague of University of New Hampshire have received as a result of our articles in the January issue of Communications News are testimony to this fact. For instance Bell Canada has invited me as President of ACUTA, to address 150 of their management personnel from the Ontario Region Business Services Division at their Conference later this month. My topic will be the Changing Role of the Telecommunications Manager. This type of publicity for our Association in professional circles is vital to our continued growth and development, and I would urge you all to make an effort to come up with your own article and submit it to Publicity Chairperson Connie Gentry at Emory University in Atlanta.

And finally I would like to offer congratulations to Esther and Elwyn on the latest addition to the Hull family. Elwyn had travelled to Maryland for the Winter Workshop and was there only one day when he received word from home that Esther could'n wait any longer. Dick Werner rushed him to the airport while Doug Brummell checked Elwyn out of the Centre and I booked his flights through to Salt Lake City. He made the first flight with seconds to spare and connected O.K. in Atlanta. It was all to no avail, however, as Esther gave birth to a bouncing baby girl while Elwyn was still literally up-in-the-air.

That's it for this month. Best wishes to you all.

Mal Reader, President - ACUTA  
York University, Toronto

## PARTY LINE

Guest Editor for "Party Line" this month is Robert W. Devenish. Bob sent a letter that has such an important message for all of us, that I am using it as the Party Line column this month. Thanks Bob!

.....We're just now able to look over our snow banks and see that the world is still there. For a while I thought that they had stopped the world and I had gotten off.

I'm writing to tell you of an experience I had which certainly adds emphasis to our President's idea of the changing of our role as Telecommunicators.

The head of our Computing Center was visiting with his counterpart at another large University where the telephone system is part of the Management Information System. At that institution they recently lost their telecommunication manager and are attempting to hire a replacement. The personnel office is refusing to permit paying a salary that will attract a qualified person. It seems that the personnel office believes that the Telecommunication Manager simply relays requests from the departments to the Telephone Company and that it takes little ability to do this simple task.

Now the Computing Center Director is altering the duties only slightly and will be hiring a Management Information Specialist who will be doing what the Telecommunication Manager did with some minor alterations.

The point of this long story is that if we as Telecommunication Managers don't broaden our base, we will not be advancing up the pay scale and might not even be employed.

We have to know about Word Processing and Data Communications and know how to use our knowledge of telephone systems and people to make these new buzz words a working reality.

It could be that we should be looking for a new title that will help us gain stature in the eyes of the academic community in which we compete with sanitary engineers for a better pay check.....

Sincerely,

/s/ "Bob"

Robert W. Devenish, Manager  
University of Wisconsin Telecommunications

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### HELP WANTED!

Solicitations to exhibit at the Eighth Annual ACUTA Conference in Atlanta have been sent to over 75 vendors. If you have any connections with vendors or companies you think should be exhibiting in Atlanta, get in touch with them. Encourage them to exhibit and to support ACUTA. If you have any ideas along this line, contact:

Connie Gentry, 404-329-4320.

She will appreciate any help you can give!



# POTPOURI POTPOURI POTPOURI

## Connie Gentry, Emory University

At the risk of offending all you snowbound folks, Atlanta had it's first serious snowfall last week.....the most beautiful fat, fluffy, winter-wonderland flakes I've ever seen. Now, I can appreciate snow because down here we only have it once or twice a year and it never becomes a hazard to life and limb unless we've had freezing rain, too, and the roads get bad...which is almost never. I just don't understand why or how people can stand to live in places that get twenty or thirty inches of snow a year or MORE! But never fear! By the week of August 6-10, all the snow will be gone we'll be heating up Big A with the ACUTA conference!

However, speaking of snowjobs, you might find this quote from former AT&T chairman John D. deButts interesting: "We do not set the prices for our services. Rate increases are granted by regulatory commissions. Accordingly, it is hoped that regulators will recognize that our readiness to comply with the administration's anti-inflation program should not be construed as an indication that our financial requirements are less than the level documented in our testimony." I wonder if he believes this. Do you believe this? Do you believe in the tooth fairy?

Does the name Antonio Meucci ring a bell? No? Well, if not for a twist of fate the telephone system serving your campus might have been installed by Pa Meucci instead of Ma Bell. According to John La Corte, founder and director of the Italian Historical Society of America, it was Antonio who filed the original "Telefono" patent on Dec. 28, 1871, five years before A.G.B. Mr. La Corte goes on to say that because Meucci couldn't afford the \$250 for a regular patent he had to settle for a temporary patent. In 1874 when his patent came up for renewal he couldn't afford that either, so the patent lapsed. Now the thot plickens...supposedly A.G.B. (why do I always think of Don Ameche?) bribed the curator of the patent office with a bottle of whiskey and was allowed to go through the patent files and after that Antonio's original papers were never seen again. And we all know what old A.G.B. did several years later. Verrrrrry interesting! What a great movie this would make....Robert De Niro as the poor but brilliant Meucci, Marlon Brando as the wealthy but (allegedy) unscrupulous A.G.B., Raquel Welch as Emma Nutt who longs to be the first telephone operator in the world just as soon as someone gets around to inventing it, Dustin Hoffman and Robert Redford as Washington Post reporters investigating the scandal and Henery Fonda as the chairman of the FCC struggling to balance his love for Emma against official rules and regulations. If Hollywood doesn't want it maybe one of the networks could do a mini-series! I may have found a new career!

Its official now. Vanderbilt University has signed a \$4.5 mil contract with Northern Telecom, Inc. for two interconnected SL-1's. The system will be operational by 1980.

If you own, lease or rent electronic facsimile equipment either to provide commercial services or for your own in-plant use, you may join the newly formed International Electronic Facsimile Users Association (IEFUA). Write for info to IEFUA at 528 South US 1, Fort Pierce, Fla. 33450

It seems as if everyone's getting into the action. Xerox Corporation has filed a petition with the FCC for a new broadband digital network called the Xerox Telecommunications Network (XTEN). If you want to know everything there is to know about this system read the excellent article in the Jan - Feb issue of Business Communications Review. Also Xerox is trying to acquire WUI, the parent company of Western Union International Inc.

Remember the John de Butts quote at the beginning of this column? Well, four small Telecomm. companies have petitioned the FCC to take action to halt what they say is "alleged widespread predatory pricing", by the Bell System and other common carriers. The companies want the FCC to force the telephone utilities to set up separate subsidiaries for all telephone equipment sales and they want a ban on the sale by carriers of equipment in the same areas they serve as regulated common carriers. Back to the drawing board fellas....if the common carriers don't set the prices for their services, the FCC can't help you.

Get ready...here comes my sermon of the month. But first we pause for a message from Charles Ferris of the FCC. "We began with telegraph and telephone. Now we have teleprocessing, teleconferencing, and even telemedicine. The merging of computer and communication technology is likely to alter the way we transmit mail, handle financial transactions, educate ourselves and retrieve information. This impacts on basic lifestyle patterns of all Americans...." Now the sermon...and it's really not original...just a re-statement of what Jerry Goldstone, editor and publisher of BCR told us in Snowbird during the keynote address...every one of us had better get our butts in gear and take advantage of every opportunity we can to educate ourselves and keep abreast of what's happening in our chosen field of endeavor. We'd better know our beans, friends and we'd better make sure that our bosses and their bosses know that we know. And you know I'm not talking about key sets, WATS lines, etc., I'm talking about computers, electronic mail, digital switching, etc. If you can't keep up with the ever changing technology in telecommunications and make that technology work for your employer and for you, you're in Baaaaad trouble. Let the church say AMEN!

Quote of the month comes from that old cynic Ambrose Bierce (my kind of man!), "Contentment is the smother of invention-" See you next month.

\*\*\*\*\*  
Food for thought:  
.....We judge ourselves by what we feel capable of doing, but others judge us by what we have already done.....

Longfellow

.....Training is everything. The peach was once a bitter almond; cauliflower is nothing but cabbage with a college education.....

Mark Twain



ACUTA WELCOMES THE FOLLOWING NEW MEMBERS:

Region III:

F. Edward Schon  
Manager Campus Services  
University of Michigan-Flint  
Flint, Michigan 48503  
313-762-3000

Region V:

Deidre Searles, Manager Marketing  
Datapoint Corporation  
8410 Datapoint Drive  
San Antonio, Texas 78284  
512-699-7280

Tim A. Cole, Account Executive II  
Mountain Bell - Colorado  
1005 17th Street, room 1070A  
Denver, Colorado 80202  
303-624-1571

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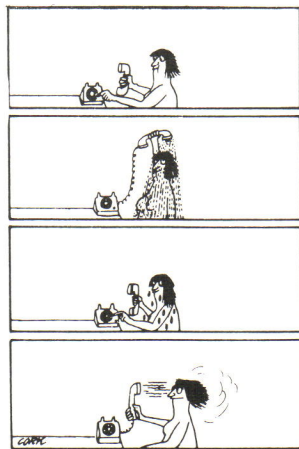
Don't know if you can identify the point of this picture, but Mouth of the South wants us all to know they had SNOW this winter.... I think its that light colored stuff on the rooftops.....



MORE BITS & PIECES:

Did you know that Alexander Graham Bell was trying to invent a workable hearing aid for his practically deaf wife and that this aid led to the discovery of the principles for the telephone?

According to W. J. Bowerman and Dr. W. E. Harris, authors of "Jogging," the most common exercises indulged in by the average American male are "running down their friends, jumping to conclusions, side-stepping responsibility and pushing their luck." Not anyone I know.....



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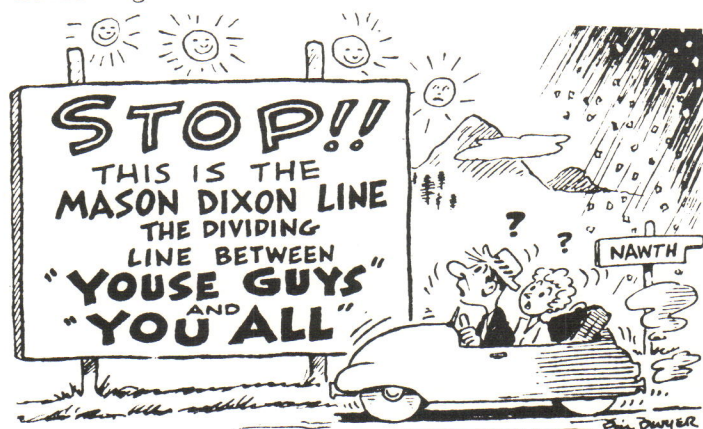
## "MOUTH OF THE SOUTH" News from Region 2

Hats off to our Editor and all those who contributed to the January/February ACUTA newsletter. ACUTA News is truly becoming, "The Voice of Telecommunications in Higher Education". While I'm on my soap box, I hope all our "Industry" (telephone companies) noticed two items that related to telephone directories and Directory Assistance. Our Editor asked for help in handling the charges for Directory Assistance relating to dorms, hospitals, etc., and Elwyn was concerned about the number of "Free" listings. Well old "Cotton Mouth" has been down both of these roads (with little or no success) and would like to inject a third dilemma. Our Telephone Company limits us to approximately 200 city directories. We need approximately 13,000 copies on our campus. We have to buy 12,800 copies at approximately \$1.00 each.

I am sure that all ACUTA telecommunication managers can sympathize with the Directory Assistance problems and their associated costs. We would also agree that Directory Assistance is often abused. However if the telephone companies don't want us to call them for telephone numbers the least they can do is to allow us to list our departments and frequently called numbers free of charge. They also could furnish us with adequate copies of their books so we can look up telephone numbers. At the present time, they have us in a "Catch 22" situation. They limit our listings, limit the distribution of their books, and yet they sock it to us (\$\$\$) when we call Directory Assistance.

I would like to offer an open challenge to all telephone company Industry Members to comment on this situation. If the "System is the solution" or "We hear you" has any true meaning, what are you doing to improve this problem? Also remember that your fingers can't do much walking if you don't have a directory. Would someone also explain to me, based on the above, why the telephone companies don't publish an IN-WATS Directory. The only way you can get such numbers is via an operator, and they have already said that this was an expensive proposition. One last comment--please don't tell me it is not in the "Tariff". Tariffs were written by telephone companies and can be changed by telephone companies.

A Southern Gentlemen always respects the wishes of a Yankee Lady, especially when she is the Editor and has the power of the press at her finger tips; so we will only give you the following southern education this month:





# MOTOROLA KEEPS THE BAD GUYS

A police officer, crouching in the darkness outside a tenement, speaks into his portable radio...

"This is 2L7. I'm covering the front door..."

"Right, 2L7," comes the answer.

"This is 2Li4.

I've got the rear

covered and

sent a man up onto the roof..."

The police are converging on a sniper, and thanks to two-way radio, every officer knows where every man is located.

Unfortunately, so does the sniper. He found out simply by tuning in police radio channels.

In the same way, a fugitive might learn where all the police roadblocks are located, and escape. Or a narcotics smuggler might learn that federal agents are waiting for him, and simply take his lethal cargo by an alternate route.

## **ELECTRONIC PRIVACY AT WILL.**

It became apparent that a private medium of communication would help the police do their job better, and Motorola applied its talents to solving this problem of electronic eavesdroppers.

We came up with a Digital

Voice Protection (DVP) system that gives the highest level of voice security commercially available, a system that's available only to public safety agencies.

A police officer uses Motorola DVP by touching the buttons on a

microprocessor-controlled device

called a Code Inserter (it looks like a hefty pocket calculator) and plugging the Code Inserter into his field radio. This transfers the code to Motorola radios equipped for DVP reception.

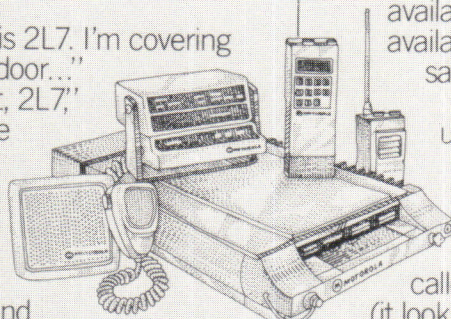
Each radio contains two integrated circuits. One of them converts regular speech

into digital speech. The other scrambles that signal through what engineers call a multi-register non-linear combiner algorithm.

## **MICROPROCESSOR HANDLES TWO SEXTILLION CODES.**

Any voice message passing through this formidable process sounds to an eavesdropper like impenetrable static—but, of course, the police, with compatible DVP equipment, can hear each other clearly.

Motorola's DVP system has an astonishing capacity for keeping a secret. It can scramble voice communication





# FROM TUNING IN THE GOOD GUYS.

through more than two sextillion (that's a two with 21 zeroes) different codes.

If the DVP function isn't being used, voice messages come through loud and clear on standard two-way radios.

Esoteric as it sounds, this system is being used right now by the police in one of our major cities. Its performance there suggests that it may soon be working for public safety agencies all over the country.

## IMAGINATIVE ELECTRONICS.

The microprocessor technology that makes Motorola's DVP system work is at the heart of

many of the things Motorola makes today. For we're not only one of the world's largest manufacturers dedicated exclusively to electronics, but also one of its foremost designers of custom and standard semiconductors.



A microcomputer, drawn larger than life.

We've come a long way from the time when we put radios into cars fifty years ago, and put TV sets into America's living rooms. Now we make hundreds of models of two-way radios, and although we no longer make home TV sets

here at all, we do make some of the most advanced and durable TV cameras and monitors for industrial security systems.

We make microelectronics technology do a lot of other things, too. Like carrying telephone service to places where there are no phone lines. Transmitting electrocardiograms and voice messages simultaneously from the scene of an accident to a nearby hospital. Helping busy people stay in touch while they're on the go with pocket-sized pagers.


And, of course, keeping the bad guys from tuning in the good guys.



## MOTOROLA

**Making electronics history since 1928.**

For further information, write Public Affairs Office, Corporate Offices, Motorola, Inc., 1303 E. Algonquin Road, Schaumburg, Illinois 60196.

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## **VIRGINIA VIEW**

### **Mike Grunder, Virginia Tech**

#### THE MARYLAND WORKSHOP

The celebration of my 23rd (?) birthday was only one of the high points of the Regions I & II workshop that took place at the University of Maryland this past January 23rd through 26th. Workshop host Pete Wrike did an admirable job of coordinating the event which was held at the University's Adult Education Center.

For those of you who missed it, the program included a wide variety of topics. Toll control and least cost routing were discussed by Homer Lange of George Washington and Pierre Malochee of Catholic University. Mort Berlan of MIT and Pete Wrike talked about their experiences with interconnect. On the vendor front Bill VonMeister, late of TDX and currently in charge of Digital Broadcasting Corporation and Carl Vorder Bruegge of MCI discussed the whys and wherefors of their products. Taking advantage of our proximity to Washington D.C., Dr. Charles Jackson, technical advisor to the House Communications Sub-Committee brought us up to date on the latest effort to rewrite the Communications Act of 1934 and William Von Alven of the FCC's interconnect registration program spoke on the latest happenings in that area. Last but not least Ma Bell and Company were present and played (among other things) several games of long distance TIC TAC TOE on their electronic blackboard.

It was a well rounded and interesting program. For me there were a couple of high points (besides my alleged birthday party and a lost evening in Georgetown). I was particularly impressed with Pierre and Homers discussion of toll control, least cost routing and TDX. Like many of you, I too have heard my share of lectures on toll control and least cost routing. And I am more than a little familiar with TDX. What made this one a little different and more interesting was that the narrative didn't just recount how two hard working guys saved their universities thousands of dollars through hard work, intelligence and never say die perseverance.

Rather, Pierre gave us an inside look at a project that just isn't working quite right. I've read too many articles on this topic where only the positive aspects are stressed and one comes away with the impression that setting up a toll control/least cost routing system is as easy as falling off a log. It was both refreshing and informative to get a first hand look at both sides of the coin. I hope we'll hear more from Pierre in the future.

The other performance that stands out in my mind was Bill VonMeister's demonstration of his new digital broadcasting technique. Roughly speaking it works something like this: The customer's computer terminal is hooked, usually acoustically by telephone, to the Digital Broadcasting Corporation's main computer. Messages are routed through the computer and out over an unused FM subcarrier which is leased from a local FM radio station. The signal is digitally modulated and goes to a small FM receiver (on customer premises) which drives a microprocessor and a high speed printer. (Forgive me Bill if I butchered that too badly!) The messages you send can be routed to as many or as few locations as you desire.

According to its creator, it is fast, accurate, relatively inexpensive and provides printed communication. The FM carrier, the printers, the microprocessors and, if need be, the originate terminals are provided by Digital Broadcasting Corporation. Very Clever!

The workshop wound up on an interesting and positive note. We had an impromptu session on how to best handle the training sessions at at workshop or conference. Some good ideas were kicked around on the benefits and drawbacks of short, "round table" type sessions as compared to longer, more formal presentations. A consensus was not reached but the discussion was opened and forthright. That in itself is good and healthy for the organization.

#### TAPE RECORDERS

Do any of you have policies concerning the purchase and use of telephone answering tape recorders on university telephones? For better or worse, we do.

Briefly stated the policy prohibits their use except under "special circumstances". The "special circumstances" are determined by (you guessed it) yours truly, on a case by case basis.

I'm currently involved in handling several requests for recorders all at once. While the future of telecommunications doesn't really hang in the balance, it has turned into a complicated and confusing situation which I think is worth sharing.

Besides the fact that our policy is a pain in the neck to administer, I have to admit it is logical. On the PR side the university doesn't want a lot of it's phones answered by machines. Being a land grant university, we have a huge public service mission.

On the other side, tape recorders can get pretty expensive and they have what I call "gimmic appeal", once the thrill of it all wears off, too many end up as dust catchers in a storage closet.

In general, logic dictates who does and doesn't get one (at least we like to think we're logical). Professors don't usually get them for "lack of a secretary", there are other, cheaper ways to solve that problem. Things like the Performing Arts Ticket Office get them for after hours ticket information.

Some of the more obvious things to consider once you decide to get one: First, might the Telco still be leasing them and if so, for how much? If the price is right the maintenance is great. Here C&P only offers one model. It's an "answer only" machine (i.e. it gives a message but won't let you leave one) and is too expensive.

Once you decide to buy you'll find more models out there than you can shake a stick at. Prices range from the \$45.00 - \$50.00 range right through the outrageous to the absurd. First thing to check for is an FCC Compliance number so you can connect right into the telephone network without paying the telco for an interface device. Most models are FCC approved but many still don't advertise it much. I wonder why?



## Virginia View continued:

What type connecting block does the machine hook up to? Is it a portable type (modular) or will it be hardwired to the phone line? The vendor should be able to give you the correct USOC code to order from the Telco (Don't forget to see what the Telco charges to install the connecting block. And some blocks will also have a monthly charge). If the vendor can't provide you with the proper connecting block designation, or for that matter, if they hedge on what the FCC compliance number is, find another vendor.

As far as quality is concerned, my rule of thumb is to stay away from the real cheapies, seems like you're just asking for trouble. There are many good looking models available in the \$180.00 to \$220.00 range. These are marketed for "home use" -- i.e. light to moderate usage. The heavy usage models get you into the \$400.00 to \$500.00 range.

In determining the quality and type of machine you buy you must first decide exactly what you're going to use it for. How heavy will usage be and do you need it to give and receive messages? If all you want to do is give a message, don't buy a machine that receives messages too. Many of them are set up so that the message receiving mechanism can't be over ridden. Thus, each time you give a message you also record 30 or 40 seconds of dial tone after the person hangs up. Eventually, you reach the end of the record tape and the machine goes out of business until you rewind it.

Also, some machines work with cassette tapes, others with a reel to reel or "closed loop" system. And the length of your outgoing and incoming messages will vary from machine to machine. Some will hold each incoming message to a predetermined length (say 30 seconds) where others will allow any one person to talk until the tape runs out. Watch this stuff closely so you're sure to get the right machine for your application.

Finally, a lot of machines now offer a remote access device so you can call it periodically and retrieve your messages. Be sure to ask how the machine responds to this device and in what manner it sets itself back up for operation after you access it. Does it rewind back to the beginning and erase your messages or does it pick up after the last message? Each way has its advantages and disadvantages.

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### REMINDER:

1979 MIDWESTERN TELECOMMUNICATION M & D

CONFERENCE - May 9 thru 11, 1979  
Rapid City, South Dakota  
(Howard Johnson's)

For further information, please contact:

Jim Stein, Telecommunications Section  
Office of Central Services  
State Capitol  
Pierre, S. D., 57501

604-773-3121

## BITS & PIECES

What a terrific response to our info requests on Directory Assistance charges and Directory listings. I have condensed some of the letters and the answers are listed below:

From Nancy Swink, Uni of Florida:

.....1 directory listing call per month per station free. Hospital rooms and hospital administration stations exempt. Dorm phones are treated as resident phones and receive 6 directory calls per month free. Any number over that is billed to the student on his toll bill, which is handled directly with the student by the telephone co. In fact, all charges for directory assistance is billed with the toll charges. Nancy was emphatic on this point that the University was NOT to incur any additional billing expense as a result of directory assistance charges. Long distance directory assistance calls are free if outside the home area code. If within the home area code they count the same as any other D.A. call. If I understood correctly, Nancy estimated the fiscal impact on directory assistance charges to be approximately \$1200.00 per month. For listings in the telephone directory, they receive 1/8 of their total stations (7500) listed free in the directory. If any listing is repeated, they are charged for that listing.....

From R. D. Whipple, Texas Tech in Lubbock, Tex:

.....Texas Tech is served by an ESS 1. Dorm stations without access to directory assistance is included in room rent. Students can contract directly with Southwestern Bell for toll service which includes directory assistance. Hospital rooms are exempt. Administrative stations are charged. Multi-line subscribers are allowed a certain number of calls each month, with a per-call charge thereafter for the balance of the month. Compute the unit costs by dividing the total month's cost by the total number of D.A. calls made during the month and charge back all D.A. calls to the station account. D.A. calls can be included in the SMDR magnetic tape available in the ESS 1 Centrex Service. Blind students are issued a personal identifying code, which when given to D.A. Operator at time of requesting directory assistance, negates the charge.....

From Michael A. R. Shanks, Uni of New Brunswick:

.....The University of New Brunswick in Fredericton, N.B., Canada is served by an SL-1 Centrex System. A charge of 15¢ applies for each telephone number provided by the telco's D.A. Operators when the number appears in any of the telco's published telephone directories. Exceptions are:  
(1) the rate for primary exchange service and message toll service (intraprovincial) includes up to five such numbers per primary exchange service (i.e. main billing number-department) per month (2) when requested at the same time, a second number will be provided free and (3) when the number is requested for an emergency organization. It has been our experience that usage of d.a. calls by our departments is largely limited to the 5 calls per month and under range, and their charges are of little concern to us.....

From Steve Harward, Uni of North Carolina at Chapel Hill.

.....Concerning directory listings, Southern Bell policy as it relates to a Centrex user is:  
1) Each Centrex system is entitled to ONE free listing. 2) Additional listings, up to 1/8 (one-eighth) the number of main stations in a Centrex System may be provided at no cost if required to properly identify the subscriber.



## Bits & Pieces continued:

(3) Further listings may be provided at no cost when, in the judgement of Southern Bell, these listings would facilitate the telephone company's operations. (Steve asks us "not to question the origin of the magic figure 'one-eighth'!") In practice, UNC has published a "Blue Page" insert to the local directory in lieu of the standard white pages listing. The Blue Pages contain departments, organizations and faculty/staff. As you might guess, we pay dearly for this service, but it does seem to be a popular item. I have been in the process of "testing the water" prior to recommending elimination of the blue pages, at least a portion. Southern Bell has verbally agreed to provide us with the number of listings required to list our department and organization section in the white pages, less any listings including an individual's name. This would enable us to eliminate the D & O section from the Blue Pages and save a substantial sum. Depending upon the sentiment of the Administration, it may be possible to eliminate the faculty/staff section as well and save the entire cost of the Blue Pages publication. We are making use of our computerized directory file to provide Bell with bi-weekly updates of information listings for the University. Any further questions, call 919-933-8353.....

And from Claude B. Sterling, Pacific Union College in Angwin, California  
.....regarding directory listings, on our campus we have CU 701 Step Centrex II with dial transfer. At the present time, this is one of the biggest bargains Bell offers in this area and is not available to new subscribers. Our rate structure is basically: Administrative - (min of 100 lines in the basic equipment charge) is 460.00 for the basic equipment and 8.85 for each local per month. In other words, the first 100 lines cost 13.55 and any additional locals cost 8.85. Our dorm rates are 4.95 per month which is equivalent to two-party residence service in this area and we get one-party service with call transfer. In contrast to this would be the one-party business at 15.40 per month. The rationale for directory listing has been given to me that Centrex Service is in effect, discount service for equivalent central office service and therefore adding back in the 75¢ per month white page listing per entry we are still under equivalent service without the Centrex. There is a rate revision before the Commission which would raise the main service and lower the extension charge (now 3.75 per month), however, the new rates anticipates having a line charge and an instrument charge which might make it worthwhile for the college to own it's own instruments. Time will tell. As far as I know, Pacific Northwest Bell has the same rate structure giving you one free listing and charging for any additional listings.....

Also from Claude, he has developed a computer program in basic language for distributing the long distance charges to departments making the calls. He has very generously offered to make this program available to ACUTA members. He said the program is readily adaptable to any computer system having High Order or Basic II language. He uses a Hewlett Packard 3000, but says it will even work on the \$800.00 Radio Shack Model. Claude is employed full time as the Associate Business Manager at Pacific Union College and is actively engaged in his MBA program in Telecommunications Management at Golden Gate University. Via this means, I

would like to ask Claude to do an article for ACUTA News on some of the interesting things he is doing. We will be looking forward to hearing from him soon. If anyone is interested in the Computer Billing Program mentioned, contact Claude Sterling, 707-965-6232.....

Mouth of the South asks for word of former or inactive ACUTA members. Anything on Russ Montgomery, Nancy McReynolds, Don Latuk, Lou Ross, Gerald Johnson and others????

Southern Bell has introduced its latest device for the business world - the Picturephone - which Bell says could save companies time and money. Atlanta became part of a nationwide video conference when Bell held its first Picturephoto Meeting Service at the Georgia World Congress Center. The service makes it possible for executives to hold face-to-face talk meetings at various locations in the U.S. The system uses six cameras and mikes which record the images and conversation and project both onto monitors in other cities. Cameras with zoom capabilities allow focus on slides, films and charts. Southern Bell plans to expand the system to other major cities in the 1980s....

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Last Month's photo was identified by both Dorothy Heinecke and Norm Sefton. The girl is Nancy McReynolds from Tulane and the man is Alvin Telles from Western Washington State. Your editor has two more, printed below. Can anyone tell us who, where and when???







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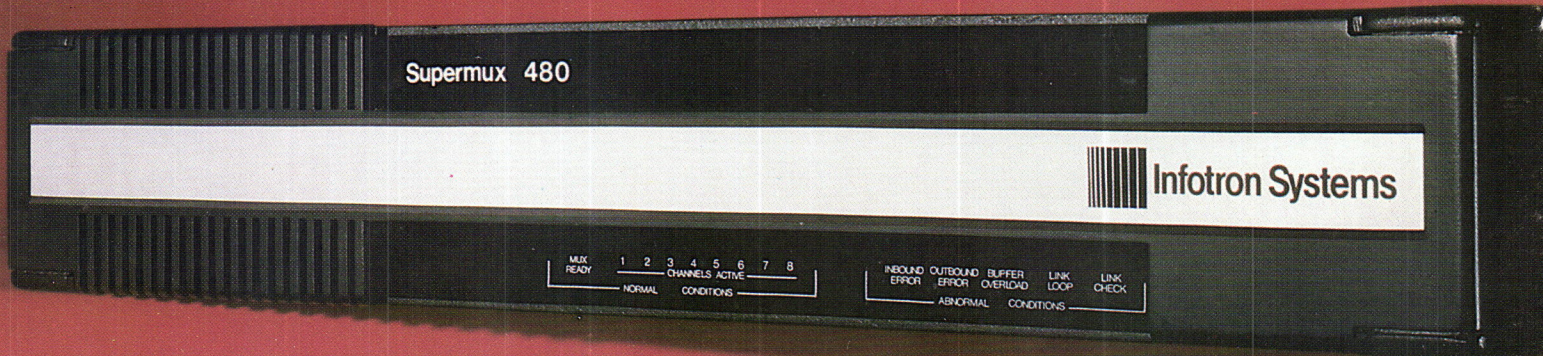
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